

REMARKS

In the Office Action, the Examiner rejected the claims under 35 USC §103. The rejections are fully traversed below. The claims have been amended to correct minor informalities and to further clarify the subject matter regarded as the invention. Claim 52 has been cancelled. Claims 1, 3, 5, 7-10, 12-27, 29-37, and 39-51 remain pending.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTION OF CLAIMS UNDER 35 USC §103

In the Office Action, the Examiner has rejected claims 1, 5, 42-44, 50 and 52 under 35 USC §103 as being unpatentable over Jones et al, U.S. Patent No. 7, 441,269, ('Jones' hereinafter) in view of Heller et al, U.S. Patent No. 6,947,400, ('Heller' hereinafter). This rejection is fully traversed below.

Claim 1, as amended, recites:

1. In a Packet Data Serving Node (PDSN) ~~PDSN~~, a method of releasing resources, comprising:
 - sending by the PDSN an access request message to a first AAA server for authentication of a node;
 - receiving by the PDSN an access accept message from the first AAA server;
 - establishing by the PDSN a Mobile IP session as a Foreign Agent for the node when an access accept message is received from the first AAA server;
 - storing by the PDSN information associated with the node in resources associated with the PDSN;
 - receiving by the PDSN a disconnect request message from the first AAA server; and
 - releasing by the PDSN the resources when the disconnect request message is received, wherein the resources are released independent of expiration of a PPP session timer;
 - wherein the resources comprise memory and the information comprises PPP information associated with a PPP session.

The Examiner asserts that Jones teaches “storing information associated with the node in resources associated with the PDSN,” citing col. 7, line 53 – col. 8, line 7. Specifically, the Examiner refers to “creates new session record, and Figure 5A, item 88. However, it is important to note that the cited portion of Jones discloses that “the stateful RADIUS server 62 creates a new session record in its cache to track the data session.” Thus, the storing of information is not performed by the PDSN. Accordingly, Jones fails to disclose or suggest “storing by the PDSN information associated with the node in resources associated with the PDSN” “wherein the resources comprise memory and the information comprises PPP information associated with a PPP session.”

The Examiner also asserts that Jones teaches “releasing the resources when the disconnect request message is received, citing col. 2, lines 30-35 and col. 5, lines 38-49. While the cited portions of Jones refer to the discarding of a stale session and the freeing up of resources, Jones fails to disclose or suggest that the PDSN releases the resources when a disconnect request message is received, where the resources comprise memory and the information comprises PPP information associated with a PPP session.

Applicant respectfully asserts that Heller fails to cure the deficiencies of Jones. The Examiner cites col. 5, lines 34-47 of Heller. However, the cited portion merely refers to a PPP session and the termination of a PPP session. In fact, the cited portion says nothing about the need for a PDSN to release resources including memory, where the resources that are released include information stored by the PDSN, where the information comprises PPP information associated with a PPP session.

As described in the Background section of Applicant's specification:

"As the mobile node moves from one foreign domain serviced by a PDSN (source PDSN), shown here as PDSN 204, to another PDSN (target PDSN), shown here as PDSN 206, during an inter-PDSN hand-off, a new PPP session is established at the target PDSN. Specifically, when the node moves or the Mobile Node 216 roams such that the PDSN 206 initiates a second PPP session, PPP state information is stored at the target PDSN 206. Thus, the first PDSN 204 no longer needs to store the PPP state information. Unfortunately, the first PDSN 204 does not release its PPP resources until the PPP session timer has expired. Since the timer may be set to a long value, for example it may expire as much as several hours after the node or mobile node has moved to another PDSN, the PPP state information may be unnecessarily stored by the first PDSN 204 during this time. Maintaining these PPP sessions and associated resources may consume valuable resources at the source PDSN that could otherwise be used to support additional mobile nodes. Since the resources available at the PDSN 204 are limited, this reduces the number of sessions the PDSN 204 can handle."

It is clear from the Background section of Applicant's specification that PPP resources are typically not released until a PPP session timer has expired. Nothing in the cited references discloses or suggests a problem associated with waiting for the PPP session timer to expire in order to release these resources. Moreover, nothing in the cited references discloses or suggests that the PDSN release these resources when a disconnect message is received such that the resources are released prior to or independent of the expiration of a PPP session timer, as recited in various pending claims.

The cited references, separately or in combination, fail to disclose or suggest the shortcomings of the prior art identified in the Background section of Applicant's specification. Similarly, the cited references, separately or in combination, discloses or suggests a solution to this problem. It is also important to note that the combination of the

cited references would fail to operate as claimed. Accordingly, Applicant respectfully submits that the pending claims are patentable over the cited references. Accordingly, Applicant respectfully asserts that claims 1, 5, 42-44, 50 and 52 are patentable over the cited references.

In the Office Action, the Examiner has rejected claims 21-27, 29, 45-46, and 51 under 35 USC §103 as being unpatentable over Jones et al, U.S. Patent No. 7, 441,269, ('Jones' hereinafter) in view of Phillips et al, U.S. Patent No. 7,454,206, ('Phillips' hereinafter). This rejection is fully traversed below.

Claim 21, as amended, recites:

21. In a AAA server, a method of initiating the release of resources in a first Packet Data Serving Node (PDSN) ~~PDSN~~, comprising:

receiving by the AAA server an access request message from a second PDSN, the access request message including a username identifier identifying a user, a session identifier identifying a session associated with the user, and a PDSN identifier identifying the first PDSN;

sending by the AAA server an access accept message to the second PDSN in response to the access request message; and

sending by the AAA server a disconnect request message to the first PDSN indicating a request to release resources associated with the session, thereby enabling the first PDSN to release the resources prior to expiration of a PPP session timer;

wherein the first PDSN releases the resources associated with the session in response to receiving the disconnect request message, wherein the resources are released prior to expiration of a PPP session timer;

wherein the resources comprise memory and wherein the session is a PPP session.

Applicant respectfully asserts that Phillips fails to cure the deficiencies of Jones, as set forth above. As a result, the combination of the cited references would fail to operate as claimed. Accordingly, Applicant respectfully asserts that claims 21-27, 29, 45-46, and 51 are patentable over the cited references.

Applicant respectfully asserts that the remaining cited references fail to cure the deficiencies of the primary references. In view of the above, Applicants respectfully submit that the independent claims are patentable over the cited art. The dependent claims depend from one of the independent claims and are therefore patentable for at least the same reasons. However, the dependent claims recite additional limitations that further distinguish them from the cited references. The additional limitations recited in the independent claims or the dependent claims are not further discussed, as the above discussed limitations are clearly sufficient to distinguish the claimed invention from the cited references. Thus, it is respectfully requested that the Examiner withdraw the rejection of the claims under 35 USC §103(a).

SUMMARY

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 504480 (Order No. CISC326).

Respectfully submitted,
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